

## CLAIM AMENDMENTS

1. (currently amended) An intelligibility measurement system, comprising in combination:

a human listener ~~hearing~~ that hears a speaker who is repeating items and repeats aloud what is heard, wherein the listener does not know a text of the items the speaker repeated prior to hearing the speaker repeating the items; ~~and wherein the listener prepares~~

a means for automatically preparing a transcription of what the listener repeats heard;

a means for automatically comparing the text of the items with the transcription; and  
a means for measuring intelligibility coupled to the comparing means.

2. (original) The system of Claim 1, wherein the speaker is at least one person whose intelligibility is to be measured.

3. (canceled)

4. (previously amended) The system of Claim 1, wherein the listener is a plurality of people capable of listening.

5. (original) The system of Claim 1, wherein the items are words.

6. (previously amended) The system of Claim 1, wherein the transcription is a written copy of what the listener heard when the speaker repeated the items.
7. (original) The system of Claim 1, wherein an error count is determined by comparing the items with the transcription.
8. (original) The system of Claim 7, wherein the error count is determined by evaluating factors selected from the group consisting of word insertions, word deletions, and word substitutions.
9. (original) The system of Claim 1, wherein an intelligibility score is determined by evaluating factors selected from the group consisting of error count, difficulty of the items, and ability of a listener.
10. (original) The system of Claim 1, wherein Item Response Theory is used to determine an intelligibility score.
11. (currently amended) An intelligibility measurement system, comprising in combination:
- a speaker that ~~repeats~~ speaks items;
  - a human listener that hears the speaker ~~repeating~~ speaking the items and repeats aloud what is heard, wherein the listener does not know a text of the items the speaker ~~repeated~~ spoke prior to hearing the speaker ~~repeating~~ speaking the items;

an automatic speech recognition transcription program operable to create a transcription of what the listener repeats; and

a measurement unit operable to determine an intelligibility score of the speaker by automatically comparing the text of the items to the transcription ~~a transcription prepared by the listener of what the listener heard when the speaker repeated the items.~~

12. (original) The system of Claim 11, wherein the speaker is at least one person whose intelligibility is to be measured.

13. (original) The system of Claim 11, wherein the listener is a plurality of people capable of listening.

14. (original) The system of Claim 11, wherein the listener is selected based on certain background characteristics.

15. (currently amended) The system of Claim 11, wherein the transcription is a written copy of what the listener heard when the speaker ~~repeated~~ spoke the items.

16. (original) The system of Claim 11, wherein the items are words.

17. (original) The system of Claim 11, wherein an error count is determined by comparing the items with the transcription.

18. (original) The system of Claim 17, wherein the error count is determined by evaluating factors selected from the group consisting of word insertions, word deletions, and word substitutions.

19. (original) The system of Claim 11, wherein the intelligibility score is determined by evaluating factors selected from the group consisting of error count, difficulty of the items, and ability of the listener.

20. (original) The system of Claim 11, wherein the measurement unit uses Item Response Theory to determine the intelligibility score.

21. (currently amended) An intelligibility measurement system, comprising in combination:

a speaker whose intelligibility is to be measured;

a human listener that hears the speaker ~~repeat~~ speak words and repeats aloud what is heard, wherein the listener does not know what words the speaker ~~repeated~~ spoke prior to hearing the speaker ~~repeating~~ speaking the words;

an automatic speech recognition transcription program operable to create a transcription of what the listener repeats; and

a measurement unit operable to determine an intelligibility score of the speaker using the transcription ~~a transcription of what the listener hears, wherein the transcription is a written copy prepared by the human listener of what the listener heard when the speaker repeated the words~~, wherein an error count is determined by automatically comparing the

words with the transcription, and wherein the measurement unit uses Item Response Theory to determine the intelligibility score.

22. (original) The system of Claim 21, wherein the error count is determined by evaluating factors selected from the group consisting of word insertions, word deletions, and word substitutions.

23. (original) The system of Claim 21, wherein the intelligibility score is determined by evaluating factors selected from the group consisting of error count, difficulty of the items, and ability of the listener.

24. (currently amended) A method of measuring intelligibility, comprising in combination:  
obtaining responses from a speaker ~~repeating~~ speaking items;  
presenting the responses to a human listener, wherein the listener does not know a text of the items the speaker ~~repeated~~ spoke prior to hearing the speaker ~~repeating~~ speaking the items;  
repeating the spoken responses aloud by the listener;  
automatically creating a transcription of what the listener repeats ~~hears when~~ ~~listening to the responses from the speaker;~~  
measuring accuracy by automatically comparing the text of the items with the transcription; and  
determining an intelligibility score of the speaker based at least in part on the measuring step.

25. (canceled)

26. (original) The method of Claim 24, wherein the speaker is at least one person whose intelligibility is to be measured.

27. (canceled)

28. (previously presented) The method of Claim 24, wherein the items are words.

29. (original) The method of Claim 24, wherein the listener is a plurality of people capable of listening.

30. (canceled)

31. (canceled)

32. (currently amended) The method of Claim 24, further comprising determining an error count by comparing the text of the items with ~~[[a]]~~ the transcription of what the listener repeats heard.

33. (original) The method of Claim 32, wherein the error count is determined by evaluating factors selected from the group consisting of word insertions, word deletions, and word substitutions.

34. (original) The method of Claim 24, wherein the intelligibility score is determined by evaluating factors selected from the group consisting of error count, difficulty of items, and ability of the listener.

35. (original) The method of Claim 24, wherein Item Response Theory is used to determine the intelligibility score.

36. (currently amended) An automated intelligibility measurement system, comprising in combination:

a speaker that provides a response by ~~repeating~~ speaking items;

a human listener that provides a spoken repetition of what the listener heard when listening to the speaker ~~repeating~~ speaking the items, wherein the listener does not know a text of the items the speaker ~~repeated~~ spoke prior to hearing the speaker ~~repeating~~ speaking the items;

an automatic speech recognition transcription program operable to create a transcription of the repetition;

a database that contains speaker responses, the text of the items, and transcriptions of the listener repetitions; and

a nonlinear model operable to provide an intelligibility estimate of the speaker's intelligibility by automatically comparing the text of the items and the transcriptions ~~listener repetitions~~ contained in the database.

37. (original) The system of Claim 36, wherein the speaker is at least one person whose intelligibility is to be measured.

38. (original) The system of Claim 36, wherein the database contains data from previous intelligibility evaluations.

39. (canceled)

40. (original) The system of Claim 36, wherein the nonlinear model is a neural network.

41. (previously presented) The system of Claim 10, wherein the intelligibility score is an objective measurement of the speaker's intelligibility.

42. (previously presented) The system of Claim 11, wherein the intelligibility score is an objective measurement of the speaker's intelligibility.

43. (previously presented) The system of Claim 21, wherein the intelligibility score is an objective measurement of the speaker's intelligibility.



44. (previously presented) The method of Claim 24, wherein the intelligibility score is an objective measurement of the speaker's intelligibility.

45. (currently amended) An intelligibility measurement system, comprising in combination:

a human listener that repeats aloud what is heard when listening to ~~hearing~~ a speaker who is ~~repeating~~ speaking items, wherein the listener does not know a text of the items the speaker ~~repeated~~ spoke prior to hearing the speaker ~~repeating~~ speaking the items;

an automatic speech recognition transcription program operable to create a transcription of what the listener repeats;

~~a human transcriber preparing a transcription of what was heard by the listener;~~

a means for automatically comparing the text of the items with the transcription; and

a means for measuring intelligibility coupled to the comparing means.